



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,526	01/31/2001	James L. Gregorec JR.	Ideal 428	4459

7590

10/24/2002

COOK, ALEX, McFARRON, MANZO
CUMMINGS & MEHLER, LTD.
Suite 2850
200 West Adams Street
Chicago, IL 60606

EXAMINER

HOLLINGTON, JERMELE M

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 10/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,526

Applicant(s)

GREGOREC ET AL.

Examiner

Jermele M. Hollington

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 3,5,13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan. 31, 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Note to the applicants that another examiner is examining this application for the remainder of the time of this application.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, eccentrically mounted weight [claim1] must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Moreira (5422570).

Regarding claim 1, Moreira discloses an electronic test instrument [see Fig. 4] comprising a probe (input rectifier 51) for acquiring an AC voltage input signal (Vac) [see column 6 line 68-column 7 line 1], a converter circuit (boost converter 52) connected to the probe (51) for converting the AC voltage signal to a DC control level voltage proportional to the

Art Unit: 2829

AC voltage signal (Vac) [see column 6, line 68-column 7, line 2], and a motor (56) for creating vibration when the motor is activated, the motor (56) being activated in response to the DC control level voltage [via of inverter bridge 54] so as to run at a rate proportional to the AC voltage input signal (Vac).

Regarding claim 2, Moreira discloses an electronic test instrument [see Fig. 4] further comprising a motor drive (74) and switching regulator (inverter bridge 54) circuit connected between the converter circuit (52) and the motor (56), the motor drive (74) and switching regulator (54) circuit being responsive to the DC control level voltage.

Regarding claim 6, Moreira discloses an electronic test instrument [see Fig. 4] further comprising a clamp for engaging an AC line.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2829

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moreira (5422570) in view of Hastings et al (4634944).

Regarding claim 4, Moreira discloses an electronic test instrument [see Fig. 4] further comprising a motor drive (74) and switching regulator (inverter bridge 54) circuit connected between the converter circuit (52) and the motor (56). However, he does not disclose a battery and a chopper circuit as claimed. Hastings et al disclose [see Fig.] a motor drive and switching circuit regulator circuit (20) includes a battery (B+ and B-) and a chopper circuit (over-load protection circuit 40) that efficiently decreases the voltage from the battery (B+ and B-) prior to applying it to the motor. Further, Hastings et al teach that the addition of the battery and chopper circuit are advantageous because the battery provides a voltage source to the motor and the chopper circuit reduce the current load in the motor in the event of an overload and prevent damage to either the motor or any portion of the motor control circuit. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus of Moreira by adding a battery and chopper circuit as taught by Hastings et al in order to provide a voltage source to the motor and to reduce the current load and prevent damage to either the motor or any portion of the motor control circuit.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (5349289) in view of Luebke et al (5877618).

Regarding claim 11, Shirai discloses [see Fig.1] an electronic test instrument (10) comprising a housing (body section 12) having first (clamp cores 14a) and second (clamp cores 14b) jaws at one of the housing (12) forming a clamp (14), at least one of the jaws (14a) being movable into and out of engagement with the other jaw (14b) [shown by clamp cores 14c see

Art Unit: 2829

column 2 lines 56-57], an electric circuit in the housing (12) being operable to indicate the presence of a voltage near the jaws (14a and 14b). However, Shirai does not disclose a blade with a sensor embedded as claimed. Luebke et al disclose [see Fig. 6] an electronic test instrument (11) comprising a housing (10), a blade (blade-like probe 26) having a sensor embedded therein [see column 4 line 31] and an electrical circuit (34, 36 and 37) in the housing (10) in electrical connection with the sensor [part of the probe 26], the circuit (34, 36 and 37) being operable to indicate [indicator light] the presence of a voltage [see column 4 lines 32-33]. Further, Luebke et al teach that the addition of the blade with a sensor is advantageous because it senses the presence of a voltage near its tip to indicate to a user that a voltage source is near. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus of Shirai by adding a blade with a sensor as taught by Luebke et al. in order to indicate a user that a voltage is being sensed near its tip.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (5349289) in view of Luebke et al (5877618) as applied to claim 11 above, and further in view of Moreira (5422570).

Regarding claim 12, Shirai discloses [see Fig. 3-4] a probe (lead wires 54a and 54b) for acquiring an AC voltage input signal [via battery 50], a converter circuit (36a and 36b) connected to the probe (54a and 54b) [via of input sections 18] for converting the AC voltage signal to a DC control level voltage proportional to the AC voltage signal. However neither Shirai nor Luebke et al disclose a motor as claimed. Moreira discloses an electronic test instrument [see Fig. 4] comprising a probe (input rectifier 51) for acquiring an AC voltage input signal (V_{ac}) [see column 6 line 68-column 7 line 1], a converter circuit (boost converter 52)

Art Unit: 2829

connected to the probe (51) for converting the AC voltage signal to a DC control level voltage proportional to the AC voltage signal (Vac) [see column 6, line 68-column 7, line 2], and a motor (56) for creating vibration when the motor is activated, the motor (56) being activated in response to the DC control level voltage [via of inverter bridge 54] so as to run at a rate proportional to the AC voltage input signal (Vac). Further, Moreira teaches that the addition of the motor is advantageous because it allows a complete decoupling between rotor flux and stator current vectors and has speed and torque proportional to the voltage and current amplitude. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus of Shirai in view Luebke et al by adding motor as taught by Moreira in order to allow a complete decoupling between rotor flux and stator current vectors and maintain the speed and torque proportional to the voltage and current amplitude.

Conclusion

9. Applicant's arguments with respect to claims 1-6 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 11, applicants' argument have been fully considered but they are not persuasive for the following reasons:

(1) In response to applicants' argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., non-contact voltage sensor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(2) The applicants' argue: "*It would not be obvious to combine the probe of Luebke with the jaws 14a, 14b of Shirai because doing so would defeat the desired characteristics of Luebke...*" In response to applicants' argument, (a) "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) and (b) The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990).

(3) The applicants' argue: "*Only by using the teaching of applicant's disclosure would one consider making a combination of Shirai and Luebke. This hindsight reconstruction of the prior art is not a proper basis for a rejection of claim 11.*" In response to applicants' argument, "Any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

10. Claims 3, 5 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2829

11. Claims 7-10 are allowed over the prior art.

12. The following is a statement of reasons for the indication of allowable subject matter: claim 3 recites an electronic test instrument comprising a variable duty cycle square wave generator circuit connected between a converter and a motor drive and switching regulator circuit creating a series of on-off pulses and being responsive to the Dc control level voltage to make the width of at least one of the on or off pulses proportional to the DC control level voltage.

Claim 5 recites, inter alia, an electronic test instrument comprising a gate circuit responsive to the on signal to permit activation of the motor.

Claims 7-10 and 13-14 recite, inter alia, a second converter circuit for converting the Ac non-fundamental signal to a distortion signal which is proportional to the total distortion and noise in the AC voltage input signal and a comparator circuit for comparing the distortion signal to the DC equivalent reference voltage.

The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (703) 305-1653. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (703) 308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7382 for After Final communications.

Art Unit: 2829


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Jermele M. Hollington
Examiner
Art Unit 2829

J. M. H.

JMH

October 19, 2002


**KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800**